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ABSTRACT

This study researched whether or not Hispanic students, in spite of the digital divide, were enrolling in and succeeding at online courses. The Census Bureau projects that Hispanics will compose 25% of the United States population by the year 2050. Although the Hispanic population in Bergen County, New Jersey is only 10%, during the fall semester at Bergen Community College (BCC) the Hispanic enrollment was 22%. In spring 2002, BCC offered 70 online courses, with approximately 1,500 students registered. The literature suggests that Internet use among Hispanics is approaching, and perhaps even surpassing, that of Whites. This paper discusses whether or not the narrowing of that digital divide will translate into better performance in academics and jobs that require computer and Internet competencies. The author found that in fall 2001, 15% of those enrolled in online courses at BCC were Hispanic, while they made up 22% of the total student population. Although students of all races do not succeed at the same rate in online courses as they do in traditional courses, the success rate for Hispanics was 47%, compared with 62% for Whites. Whites are 16% more successful than Hispanics in online courses, whereas they are only 4% more successful in traditional courses. (Contains 25 references.) (NB)

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ENROLLMENT AND SUCCESS OF HISPANIC STUDENTS IN ONLINE COURSES

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ENROLLMENT AND SUCCESS OF HISPANIC STUDENTS IN ONLINE COURSES

Introduction

Rationale for the Study

Previously, this author prepared a two-part article on the changing workplace with particular emphasis on the effect that these changes would have on Hispanic workers (Angiello, 2001). The article, and a considerable amount of related literature, considered the digital divide, the notion that society is being split into information haves and have-nots. The ability to access, evaluate, and analyze information is critical today for success in all walks of life and those who do not have access and skills are increasingly being excluded from meaningful employment, and perhaps from full participation in economic, social and civic life.

Shortly after the article was published a colleague asked about my experiences as an online teacher. Given the digital divide, and the presumption that Hispanics are not using computers at the same rates as whites (Note: the term whites is used throughout the paper to denote those who self-declare as white, non-Hispanic on racial-ethnic demographic forms), were Hispanics enrolling in and succeeding at online courses? I was aware that in addition to the possible effects of the digital divide research reveals that Hispanics traditionally earn lower grades than Whites and that there is also some research which describes different learning behaviors among ethnic groups. But, until the time and impetus of the Mid-Career Fellowship Program provided the opportunity to analyze the data, I had not seriously analyzed the success or failure by ethnic/racial breakdown of either in person or online students.

Hispanic Population Data

Hispanics are the fasted growing segment of the United States population. The Census Bureau projects that Hispanics will comprise 25% of the U.S. population by the year 2050 (Carreon, 2001). The changes are felt everywhere, but New Jersey is among the states where this shift is quite significant. Consider the following data from the 2000 census. (http://quickfacts.census.gov, 2002).

Table 1: Persons of Hispanic or Latino origins

United States	12.5%
New Jersey	13.3%

Although the Hispanic population in Bergen County is only 10.3%, in the Fall 2001 semester at Bergen Community College the Hispanic enrollment reached 22%. In the past five years the percent of Hispanic students rose from 17.6% to the current 22%. Given this data, it is important that Bergen Community College examine whether or not Hispanic students have access to and are able to succeed at courses delivered in various modes. This will not necessarily come about naturally; we must be proactive to see to it that this significant percentage of our student body is successful. As Carreon (2001) says "the reality is that America's communities, America's work force, and our legacy as a free society rest on our ability to understand that paradigms of the past must be adjusted in order to propel us into the future, rather than stumble forward out of inertia" (p.120). Similarly, Florida (2001) claims that "the digital divide isn't just a pressing issue of social equity and race, it's fundamental to our ability to innovate, stay competitive, and generate economic wealth" (para. 3)

Focus on Online Courses

There is a body of literature that compares enrollment and completion in traditional courses based on race/ethnicity. But, given the newness of online education, we are only beginning to see some studies analyzing success and barely any by racial/ethnic categories. This is, therefore, an area where a significant contribution could possibly be made. Secondly, the number of courses offered online at virtually all institutions has grown dramatically over the past few years. Bergen Community College, for example, began with two courses, enrolling 12 students, in Fall 1998 and offered 70 courses, with approximately 1500 students, in Spring 2002. This has been facilitated not only by the college's own emphasis on providing access to otherwise underserved students but also by the formation of the New Jersey Virtual Community College Consortium which allows student to register for courses offered by any of the participating schools.

Although most courses are offered in traditional as well as online modes some courses are now offered only online and it is probable that this number will grow in coming years. And, even when courses are also offered in the traditional mode, online courses extend access to students who are otherwise unable to commit to the fixed time schedules or to travel to campus that traditional courses

require. While online learning is not appropriate for all students, the basis for enrollment and success should not lie in racial/ethnic differences. Online offerings should not disadvantage any particular group.

A Brief Review of the Literature

The Digital Divide

As we have evolved into the Information Age much has been written about the digital divide, the concern that segments of our society are being disenfranchised because they do not have access to computers and the Internet. They cannot, therefore acquire the skills to succeed academically or in the work place. The Clinton-Gore administration inaugurated several initiatives to improve access as have many school districts and charitable/educational/civic organizations. Statistics on computer ownership and use by racial/ethnic groups revealed that Hispanics were among the lowest. For example, according to Lane (2001) "most prominent among these lagging groups (in acquiring the computer skills required in most high-paying careers) are Hispanics" (p. 6).

Over a very brief period, however, the literature review reveals some surprising changes. At the start of 2001 news reports were bemoaning the digital divide and quoting data that claimed only 16% of Hispanics (Latinos) used the Internet (Romney, 2001). By April, The New York Times reported "that the rate at which Hispanics in this country are buying computers far outstrips that of the general population" (Hafner, p. 6) and that 42%of Hispanic households had computers. Only a few months later Schorow (2001), among others, proclaimed "the so-called digital divide has narrowed dramatically in recent years" (p. 53). She, as well as several other news sources, quote a Pew Internet Project survey showing 50% of Hispanics had Internet access. USA Today reported in September, 2001 that more Hispanic households now owned computers than White households. While there does not appear to be absolute data it does appear that computer ownership and Internet use among Hispanics is beginning to at least approach, if not surpass, that of Whites. The question remains, however, as to whether or not this narrowing of the digital divide will be reflected in better performance by Hispanics in courses and in careers that require computer and Internet competencies.

Learning Styles and Cultural Differences

Like Perez (2001), we would certainly dismiss as racist the claims that Hispanics are "incapable of understanding technology and therefore should not pursue it" or that Hispanics "do not have the mental capacity to learn technology" or that "Hispanics should not be expected to learn technology because it will cause them undue stress, to withdraw from school". On the other hand there may be valid cultural differences that online educators, as well as traditional educators, should consider.

Two bodies of research are joining to examine what other factors may influence the academic success of various racial/ethnic groups. Are there cultural differences in the way students learn? Are there cultural factors that affect student persistence and success? The limited research that has been done so far indicates this may well be the case. Zhang (2001) claims "just as the concept of cultural sensitivity is applicable to the human condition, it is equally important within the realm of instructional design and teaching" (p. 299). He goes on to say "it is critical that educators value these alternative styles and see them as viable and valid assets to instruction". According to Zhang, mainstream educators must understand and accept "the culturally different learners' values, their motives, the rewards that are meaningful to them, their locus of control, their linguistic systems, their learning styles, and their cognitive styles". Unfortunately, Zhang's generalizations regarding Hispanics' learning styles appear to be based more on personal observation than hard data and, while an interesting insight, are not necessarily valid. There are several other studies that examine Hispanic learning styles (for example, see Suarez, Fowers, Garwood, and Szapocznik 1997 study of Cuban-Americans or Sanchez and Gunawardena, 1998). One of the major difficulties in studying this issue is the problem of making generalizations about any ethnic group. We tend to "lump" all Hispanics into one group when, in fact, the Hispanic or Latino population is quite diverse, composed of many different subcultures. There is also likely to be significant differences among those whose families have been in the U.S. for generations and recent immigrants. Unfortunately, little of the data available to us allows us to make these distinctions. Therefore, while the literature reveals generalizations such as Hispanics like to work cooperatively or will

seldom disagree with the teacher we cannot say with certainty if this is still true as they become more assimilated.

A good online course can offer students the opportunity to work collaboratively and interact regularly. Much of the early online instructional design has, however, been based on individual effort. For example, in an attempt to foster critical thinking this author includes quiz questions with debatable answers. Students are expected to challenge the instructor and argue their case. Also, many online instructors penalize students for missing deadlines and quizzes and assignments have expiration dates and times after which they are no longer accessible. If, the above mentioned generalizations are correct, however, conscientious instructors must question whether we are setting Hispanics up for failure through our course design.

Research Study

The Research Questions

When the question of Hispanic enrollment in online courses was posed to me originally my immediate reaction was, yes, Hispanics are enrolling and doing as well as any other students. Upon reflection, however, I realized that this conflicted with my own research into the digital divide. If Hispanics had significantly less access to computer technology and the Internet they should be enrolling in online courses at a lesser rate than Whites. The first research question that I framed, therefore, was to examine enrollment data in online courses for Whites and Hispanics. Is Hispanic enrollment in online classes proportional to their overall enrollment in the college?

The next questions dealt with Hispanics' success in online courses. The literature on college success for the various racial/ethnic groups reveals that Hispanics generally earn lower grades than Whites. This question was addressed in two ways. First, success was defined as receiving a grade of D or better and failure as withdrawing, officially or unofficially, or receiving a grade of F. The success rate of Hispanics is compared to that of Whites for online and traditional courses. Then the mean grade point average (GPA) of Whites and Hispanics is compared for both online and traditional courses.

The Data

A file was extracted from the student database of Bergen Community College for all enrollments during the Fall 2000, Spring 2001, and Fall 2001 semesters. The file consists of 113, 860 records. The fields are: student id, birth date, gender, race/ethnicity, course and section, grade, and semester. The section designator can be used to distinguish online from in person courses. It should be noted that the race/ethnicity data is student self-declared. Since many Hispanics students are multi-racial there may be others who chose to declare as Black or Native American and yet others who refuse to identify their race/ethnicity. Also, it is impossible to tell if they are U.S. born or immigrants nor can we identify their primary language. For purposes of this study only Hispanic and White racial ethnic groups are studied but all racial ethnic groups are included for future studies. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data.

Enrollments

The first data to be examined were enrollments. This is summarized in the two tables below.

Table 2: Data by semester by race for online courses

Semester	Hispanic		White		All Other		Total
	Number	Percent	Number	Percent	Number	Percent	
Fall 2000	108	13.7	485	61.5	195	24.7	788
Spring 2001	134	13.0	651	63.2	245	23.8	1,030
Fall 2001	167	15.1	653	59.0	286	25.9	1,106
Total	409	14.0	1789	61.2	726	24.8	2,924

Table 3: Data by semester by race for traditional courses

Semester	Hispanic		White		All Other		Total
	Number	Percent	Number	Percent	Number	Percent	
Fall 2000	8,110	21.4	19,533	51.4	10,310	27.2	37,953
Spring 2001	7,308	21.5	17,209	50.5	9,550	28.0	34,067
Fall 2001	8,439	21.7	19,638	50.5	10,839	27.9	38,916
Total	23,857	21.5	56,380	50.8	30,699	27.7	110,936

Enrollment data analysis. It is obvious from the above data that Hispanics are not enrolling in online courses at the same rate as they enroll in traditional courses. Over the three-semester period Hispanics represented 21.5% of traditional enrollments but only 14% of enrollment in online courses.

What is interesting to note, however, is the change in only one year from Fall 2000 to Fall 2001. While Hispanics represented only 13.7% of online enrollment in 2000 this grew to 15.1% in 2001. The change in traditional courses is less significant, from 21.4% to 21.7%. This jump in Hispanic online enrollment fits expectations given the reported increases in computer ownership and Internet access among Hispanics over the past two years.

Grade Distribution

The grade distribution for all courses was examined and online versus traditional distributions were compared. Grade data were aggregated for all three semesters and grouped into successful (grades of D or better) and unsuccessful (failures and withdrawals). The data is summarized in the following tables.

Table 4: Percent of students who were successful

	Online	Traditional	Difference Traditional -Online
Hispanics	46.9	71.7	24.8
Whites	62.4	76.0	13.6
All others	52.5	74.1	21.6
White-Hispanic difference	15.5	4.3	

Analysis of grade distribution. It was expected from the literature review that Hispanics would be less successful than Whites both online and in traditional courses so the difference in traditional courses between Hispanics and Whites of 4.3% is not surprising. The data regarding success rate of Hispanics in online courses, however, is noteworthy. Although students of all races do not succeed in online courses at the same rate as they do in traditional courses, as was also expected from the literature review and personal experience, the difference between the two success rates is greater for Hispanics than for Whites. Whereas Whites are 13.6% less successful in online than traditional courses Hispanics are 24.8% less successful. Also, the difference in success rates online between Hispanics and Whites is 15.5% compared to the 4.3% difference in traditional courses. If we assume that Hispanics who do enroll in online courses have access to computers and the Internet then two possibilities can explain this difference. One, as a

result of the digital divide they do not yet have enough experience with technology to be successful or, two, there is some other cultural factor at work. This requires further analysis.

2000 to 2001 Grade Distribution Changes

Because the enrollment data revealed an increase in Hispanic online enrollment from Fall 2000 to Fall 2001 the success rates were disaggregated for Whites and Hispanics and compared Fall to Fall.

Table 5: Percent of online students who were successful Fall to Fall

	Fall 2000	Fall 2001	Difference
Hispanics	42.6	49.7	7.1
Whites	60.0	67.1	7.1
Difference	17.4	17.4	

Analysis of grade distribution changes. Overall, the success rate in online classes improved for all races. Interestingly, the success rate for both Whites and Hispanics improved by exactly the same amount, 7.1%. The gap between Hispanic and White success rates did not narrow despite the narrowing of the gap in their enrollment. The improvement for all online students could be attributed to both students and faculty gaining experience with online courses and/or improved systems and procedures at the college for online courses and/or better communication between the college and online students. But, the cause of this improvement, while interesting, is not the subject of this study.

Hispanic to White GPA Comparisons .

A succession of t-tests was run comparing the mean grade point average (GPA) of Hispanic and White students in online and traditional courses. The first set looked at the data aggregated over all three semesters. The null hypothesis for both online and traditional courses was that there would be no significant difference between the mean GPA of Hispanics and Whites at the 95% confidence level.

Table 6: Mean GPA over all 3 semesters

	Online	Traditional
Hispanics	2.3394	2.6111
Whites	2.7413	2.8642
GPA Difference (W-H)	0.4019	0.2531

Analysis of Hispanic to White GPA comparisons. In both cases, traditional and online, the t-test results indicated that the null hypotheses had to be rejected, that is, there is a statistically significant difference between the mean GPA for Whites and Hispanics in both online and traditional classes. The difference is not as significant for traditional classes in terms of absolute point spread but is statistically significant at the same level. This would seem to indicate that Hispanics are more disadvantaged online when compared to Whites.

Fall-to-Fall GPA Comparisons

Because Hispanic enrollment changed Fall to Fall, the data was disaggregated again to compare the two races for both types of courses each Fall and to compare them from Fall to Fall. In each set of tests the null hypothesis was that there was no difference in the means.

Table 7: Mean GPA Online Courses Fall to Fall

	Online Fall 2000	Online Fall 2001	Difference (2001-2000)
Hispanics	2.2034	2.2566	.0532
Whites	2.4422	2.9646	.5224
GPA Difference (W-H)	0.2388	0.708	

Table 8: Mean GPA Traditional Courses Fall to Fall

	Traditional Fall 2000	Traditional Fall 2001	Difference (2001-2000)
Hispanics	2.5429	2.6336	.0907
Whites	2.8238	2.8737	.0499
GPA Difference (W-H)	0.2809	0.2401	

Analysis of Fall-to Fall GPA comparisons. When the GPA of Hispanics and Whites was compared in each of the semesters for both traditional and online courses, based on t-values, the null hypothesis must be rejected, that is, there is a statistically significant difference in the mean GPA; it seems that ethnicity definitely makes a difference. Again, the data reveals that the GPA gap for online courses between Whites and Hispanics widened from 2000 to 2001 from a

difference of .2388 to .708. On the other hand, the gap between Whites and Hispanics in traditional courses narrowed from 2000 to 2001 from .2809 to .2401.

Both Hispanics and Whites improved their GPA from 2000 to 2001 in both online and traditional courses. The t-test results cause us to reject the null hypotheses, that is, to conclude that there is a statistically significant difference between the 2000 and 2001 GPA for Whites in both online and traditional courses and for Hispanics in traditional courses. Interestingly, the GPA difference for Hispanics in online courses is not statistically significant. The GPA increased by only. 0532 for Hispanics in online courses from 2000 to 2001 but increased by .5224 for Whites. This indicates that Hispanics are not improving their success rate in online courses despite the widely reported narrowing of the digital divide for them. On the other, hand Hispanics' GPA in traditional courses increased more significantly, by .0907, than Whites', only .0499

From this we can conclude that all students are doing better online than they were previously but for Hispanics the change is not statistically significant. And, the gap between the GPA of Hispanics and Whites online is increasing.

Analysis by Gender

As the data was being reviewed an interesting difference was noted in enrollment by gender. Overall, there are more women than men in both traditional and online courses for all ethnic groups. This was expected. What was not expected, however, was the disproportionate number of women enrolled online and the even more disproportionate number of women among Hispanic enrollments. This is beyond the scope of the present study but does require further analysis in follow-up studies.

Table 9: Enrollment Percents by Gender

Courses	Hispanic Female	Hispanic Male	White Female	White Male
Traditional	56.6	43.2	53	46.8
Online Courses	68.2	31.8	61	38.9

Additional Data Gathering

It was clear as this study progressed that much more information is needed before the causes of Hispanics' low enrollment and significantly lower success rate in online courses can be determined. We must have information about prior computer experience, language skills, educational background, and attitudes about the online experience. At this time logistics preclude administering a survey to those students who have already completed their online courses; it was, however, feasible to pilot a survey with currently enrolled students in three online courses with approximately 70 enrolled students. There were 49 respondents at the time this report was completed. The survey and its findings to date are being reviewed by several online faculty, an institutional researcher, and two Hispanic faculty members. If grant funding becomes available a colleague and I will modify it as necessary and administer it in a larger sample of online courses next Fall. We also hope to procure resources to follow-up with students who drop out early in their online enrollment.

Pilot study results. Of the 49 respondents eight, or 16%, are Hispanic. This is roughly proportional to their overall representation in online classes. All of them had owned their computers at least two years; all described themselves as skilled or very skilled computer users - they are not computer novices. Five of them are enrolled in their first online course; three are enrolled online for the second semester. Five indicated they "love" their online classes and would like to take all their courses online; the other 3 "like them a lot but also like in person classes as well". None expressed any dissatisfaction. Two were born in the U.S. of U.S. born parents, two were born in the U.S. of immigrant parents; three were immigrants themselves. Six of them attended high school in the U.S. One speaks only English, five primarily speak English, two primarily speak another language, presumably Spanish, but are comfortable speaking/writing English. Interestingly, one has a graduate degree, one has a bachelor's, one earned an associate's degree, and three attended another college.

There were 34 White respondents. Of these 17 had owned their computer and had Internet access for more than four years, 10 for three to four years, three for two to three years, and four for less than two years. Thirty one of them described themselves as skilled or very skilled on the computer. Eleven of the White students were in their first online class, fourteen in the second, the rest had taken three or more. Seventeen of the 34 also responded they loved online classes and would like to take all their courses online; 14 said they "like them a lot but also like in person". Twenty five of the 34 White students were born in the U.S. to U.S. born parents, four were born in the U.S. to immigrant parents, and five were born elsewhere. Twenty eight of them speak only English, for six English is the primary language but they can speak another. Of the Whites none had earned a graduate degree, one had earned a B.A., none had an associate's degree, and 17 had attended another college.

A rough analysis of these results indicates that the Hispanics enrolled in online courses are not very different from their White counterparts in terms of computer ownership, Internet access, and computer skills. It would also appear that language is not an issue for them. A greater proportion of them, however, are enrolled in their first online course (5/8 v. 11/34). Interestingly, the Hispanics who responded are better educated than the Whites.

Several questions were asked about attitudes towards online courses, the lack of personal contact, and participation in online discussions. No discernible difference appeared in the responses of Hispanics and Whites.

Conclusions

Some might say that a great deal of effort has been expended to prove what was obvious from the outset; Hispanics don't enroll in at the same rate nor do as well as Whites in online classes. But, other online instructors, Hispanic faculty with whom I discussed this project, and I did not expect to find such significant differences. It is tempting to attribute the low enrollment to the "digital divide" and to consider the increase in Hispanic enrollment from Fall 2000 to Fall 2001 as a harbinger that the effects of the divide are narrowing as more and more Hispanic

households come online and gain experience with technology. In this case all we need do is sit back and wait for Hispanics to "catch up" and eventually find them doing as well as Whites in online courses.

On the other hand, even this preliminary data suggest that there may be more to it than lack of access, that there are some cultural factors or learning style issues at work. In that case we must be proactive in narrowing this gap.

Further Studies

Clearly there is more work ahead. The Spring 2002 semester data will be added to the file and the statistics rerun to see if Hispanic enrolment increased and success rates improved. The survey is being reviewed and will be modified as necessary and then administered on a larger scale. Ideally, the survey should be administered at the start of the semester and then the information correlated to completion and grades. This will depend on the resources available, however. Also, if resources are available, follow-up studies need to be done with students who drop out of online courses to determine, among other things, if there are differences based on culture. This basic model can also be used to examine differences in enrollment and successes among Blacks and Asians and between males and females.

The Eventual Outcome

This study was originally undertaken to prove that Hispanics enroll in and do as well in online courses as Whites. Clearly this is not the case. What must now happen is that we determine why this is so and correct whatever is within the power of the college to change to ensure that Hispanics are not at a disadvantage in pursuing the opportunities offered by online education. We need to discover what cultural differences are at work so that online course designers can employ design strategies that improve the chance for success for all students.

REFERENCE LIST

Angiello, R. S. (2001, January 08). The changing nature of work in the 21st century: implications for Hispanics, part one, Hispanic Outlook, p. 31-33.

Angiello, R .S. (2001, January 29). The changing nature of work in the 21st century: computer literacy and Internet skills a must for all teachers, part two, Hispanic Outlook, p. 34-35.

Associated Press. (2001, July 26) 50 Percent of Hispanics now online. Newsday, p. A51.

Bower, B.L., & Kamata, A. (2000, Fall). Factors influencing student satisfaction with online courses. Academic Exchange Quarterly, 4, 52ff.

Bromley, H. and Apple, M.W. (1998). Education/Technology/Power. Albany: State University of New York Press.

Burniske, R. W. and Monke, L. (2001). Breaking Down the Digital Walls. Albany, State University of New York Press.

Carreon, J. (2001, September 27). Changing communities, changing America. Black Issues in Higher Education, 18. 120

Charp, S. (2001, September). Accommodating individual learning needs. THE Journal (29), 10.

Feliciano, M. T. (2001, October 25). Presentation for Hispanic Heritage Month at Bergen Community College, Paramus NJ.

Florida, R. (2001, March 26). E-clusion: it's not choice. Information Week, p. 136

Hafner, K. (2000, April 6). Hispanics are narrowing the digital divide. The New York Times, p. 6.

Hispanic Americans lead in Internet access. (2000, May). The Quill, 33.

Hispanics move to 2nd. (2000, May 7). The Seattle Times, G1.

Holsendolph, E. (2002, January 6). Digital divide shrinking, but much more work ahead. The Atlanta Journal and Constitution, 3C.

Lane, K. (2001, October 15). Today the computer lab, tomorrow the world. Community College Week, 6 ff.

Mack, R.L. (2001). The Digital Divide. Durham: Carolina Academic Press.

Rodriguez, A. P. (1999, Summer). Latino education, Latino movement. Educational Theory (49), 381-201.

Romney, L. (2000, April 12). Computer Ownership surges among Latino households. Los Angeles Times, C3.

Sanchez, I. and Gunawardena, C.N. (1998) Understanding and supporting the culturally diverse distance learner. Distance Learners in Higher Education, Gibson, C.C. (Ed.), 47-64.

Schorow, S. (2001, October 10). Closing the digital divide. The Boston Herald, O55.

Schorow, S. (2001, October 10). Surveys compute who's online. The Boston Herald, O53.

Strage, A. (2000, Summer). Predictors of college adjustment and success: similarities and differences among Southeast-Asian-Americans, Hispanic, and White students. Education (120), 731ff.

Suarez, S.S., Fowers, B.J., Garwood, C.S., & Szapocznik, J. (1997, November). Biculturalism, differentness, loneliness, and alienation in Hispanic college students. Hispanic Journal of Behavioral Sciences (19), 489-496.

True colors. (2001, April 1). American Demographics, 13.

Zhang, J.X. (2001, Summer). Cultural diversity in instructional design. International Journal of Instructional Media (28), 299ff.

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